EARLIER RECOGNITION OF PLACENTAL SEPARATION

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Reading

Various signs of placental separation are described in different text-books; no one sign alone is completely satisfactory, and some are misleading or belated in appearance. The fundus, for example, may rise, or there may be loss of blood, without separation; or the cord may continue to retract into the vagina—on applying supra-pubic pressure—after the placenta has become separated (a fact that I have often demonstrated to doubting midwives). It is now believed that separation occurs somewhat earlier than was formerly thought to be the case, and earlier recognition of separation is possible if one carefully examines the distal border of the upper uterine segment, noting its level, shape, consistence and breadth.

The Border Sign of Placental Separation

1. *Level:* (*a*) The distal border rises from one-third or half-way up (before separation) to two-thirds the way from symphysis to fundal tip (after separation).

(*b*) The distance from lower border to fundal tip decreases from six finger-breadths (before) to four or less (after separation).

2. *Shape:* Before separation the border slopes gently downwards and backwards, but afterwards it bends so sharply backwards that it resembles a step rather than a slope.

3. *Consistence:* Before separation both upper and lower uterine segments are comparatively soft, but afterwards the upper segment and its distal border become relatively harder.

4. *Breadth:* The step-like border extends from one side of the uterus to the other when placental separation is complete. Any break in this continuity signifies incomplete separation.

Advantages of the Border Sign

1. Separation of the placenta is recognized earlier—the sign being detectable anything from a few seconds to many minutes

before the disappearance (on applying supra-pubic pressure) of cord retraction.

2. Complete separation, partial separation, and non-separation, become distinguishable, and are shown respectively by measurements from top to lower border of fundus of four, five, and six finger-breadths.

3. Earlier recognition of separation encourages earlier expression of the placenta, thereby shortening the third stage of labour and period of anxiety, expediting the administration of ergometrine (when given after separation), lessening blood-loss and the need for transfusion, and speeding the departure of the accoucheur—most helpful for a busy doctor.

4. Simplicity. The step-like border can be identified with ease, even in the obese; this can be done even without uncovering the patient by introducing the examining hand under the overlying bed-clothes.

5. Fifteen years experience has confirmed its reliability, and suggested that it is the most informative single test of separation. Only three exceptions have been encountered. They are:

(*a*) With multiple pregnancy the distance from the distal border to top of fundus may sometimes be five, instead of four, finger-breadths.

(*b*) Placental separation is concealed by the presence of blood-clots in the uterus, but as soon as the clots are expressed the typical border becomes apparent.

(*c*) When separation of the placenta follows the intravenous administration of ergometrine, the border may be atypical. Unnatural methods may produce unnatural findings.

6. By observing the character of the border in conjunction with the effect of supra-pubic pressure, one can identify the presence of intra-uterine blood-clots, adherent membranes, and contraction-rings of the uterus.

(*a*) Blood-clots concealing placental separation are shown by an umbilical cord that does not retract into the vagina when the feel of the border still suggests non-separation.

(*b*) Both adherent membranes and uterine contraction-rings are characterized by a border that suggests separation of the placenta though the cord continues to retract on applying supra-pubic pressure. The two conditions can, however, be distinguished by fundal pressure, since it is effective in expressing a placenta accompanied and followed by adherent membranes, but fails to express it when the obstruction is due to a contraction-ring.

7. When placentas are retained in uteri, one is enabled to distinguish those that are still adherent (negative border sign) from those retained by a contraction-ring (positive border sign)—which is of great assistance when considering the need for performing

a manual removal of the placenta.

Conclusion

Experienced obstetricians may possess an instinct for sensing that the placenta has separated, but most doctors and midwives rely on conscious observations. To them, and particularly to general practitioner obstetricians, knowledge of the step-like border lying four fingers below the tip of the fundus, should be of much value.

RECORD KEEPING IN NATAL

" . . . In record keeping we are up against an, at present at least, apparently insuperable problem out here. Our population is nomadic, not only residentially, but also in the way people change from doctor to doctor and in their belief in quacks. We have osteopaths, chiropracters, naturopaths, oxygen therapists, exponents of ' black box ', etc., etc., all of whom advertise widely and this in a local population of only about 200,000 whites.

" The ' nomadism ' is conditioned by two factors and is particularly evident in a semi-rural practice such as my own consisting as it does of a central dormitory suburb surrounded by farms and smallholdings. A considerable number of wage-earners are employed by large industrial concerns in Durban, such as Lever's and Dunlop's, which have interests scattered over the Union, or should I say Republic? They are constantly being posted to other areas. In the periphery are those who think they would like ' to live in the country '. They buy a small-holding on which they use African labour; this can be supervised concurrently with their town job. Then they find the travelling, 25—30 miles twice daily, too much for them and off they go back to town.

" This all makes it very difficult to find a basic figure for ' numbers at risk '. Also it becomes impossible to keep complete records on any one individual. In addition to these factors there is the direct access to specialists who, regrettably, rarely find it necessary to inform the patient's own doctor of any condition they may treat . . . "

(From a letter from Dr P. H. Dalgleish, Natal.)